*A Treasure Hunt through the* ***Tennessee Academic Standards for Science*** *Implementation* ***2018-2019*** *School Year*

1. **TN Science Standards Value Statement Declarations** - There are 15 declarations on pages 1-2 that describe how our new standards are intended to guide the development and delivery of experiences that prepare all students for the challenges of the 21st century.

* Put a star next to 5 of the declarations that you feel are the most important declarations. Explain why you feel these are the most important to you.
* Put a question mark next to declarations for which you feel you need more preparation in order to provide meaningful experiences to children. Why are these areas a challenge for you?

2. What are the 4 main strands of **Disciplinary Core Ideas (DCIs)**?

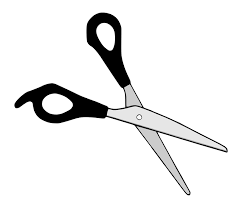
a.

b.

c.

d.



3. The **Crosscutting Concepts (CCC)** permeate all science and show an interdependent connection among the sciences differentiated from grades K-12. List the 7 crosscutting concepts below.

a.

b.

c.

d.

e.

f.

g.

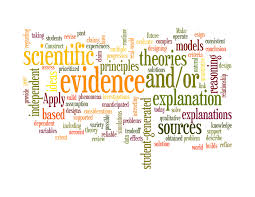
4. The **Science and Engineering Practices** **(SEP)** are used as a means to \_\_\_\_\_\_\_\_ science by \_\_\_\_\_\_\_ science. The goal is to allow students to discover how scientific \_\_\_\_\_\_\_\_\_\_ is produced and how engineering \_\_\_\_\_\_\_\_\_\_\_ are developed. The practices should not be taught in \_\_\_\_\_\_\_\_\_\_, but rather \_\_\_\_\_\_\_\_\_\_\_\_\_ at each grade level from K-12 and \_\_\_\_\_\_\_\_\_\_\_\_\_ into all core ideas employed throughout the school year. These are embedded throughout the language of the standards.

List the 8 SEPs below.

a.

b.

c.

d.

e.

f.

g.

h.

5. **Engineering Technology and Science Practice Standards (ETS)**

Technology is \_\_\_\_\_\_\_\_\_\_\_ within the writing of the engineering standards. While engineering is a DCI, it will also be taught within the \_\_\_\_\_\_\_\_\_\_ of other DCIs. Stakeholders recognize the importance of \_\_\_\_\_\_\_\_ and innovative \_\_\_\_\_\_\_\_ that can be related to the application of scientific knowledge in our society, thereby further preparing a \_\_\_\_\_\_\_ literate student for their college and career.

6. **Structure of the Standards**. Label the parts of the following standard.

3.LS4.3

7. **Elementary School Progression**. Complete a “*Close Reading*” of the paragraph and mark your observations, connections, and questions with a pencil/pen. What is the most important idea you found in this progression statement?

8. **Shifts in Sequence** (pg. 10).

Compare & Contrast the previous standards (the ones we are using now) to the new standards (beginning in 2018) for K-5 and 6-8.

9. **Disciplinary Core Ideas Across Grade Levels**. Using the chart on page 12, list all of the DCIs for the grade level of your choice, K-5.

*Grade Level* \_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
|  | **Specific DCIs at your grade level** |
| **Physical Science (PS)** |  |
| **Life Science (LS)** |  |
| **Earth and Space Science (ESS)** |  |
| **Engineering Technology, and Applications of Science (ETS)** |  |

10. **Recommended Mathematical and Literacy Skills for Science Proficiency**

*List key ideas of each literacy skill below for scientifically literate students*.

Reading:

Vocabulary:

Speaking and Listening:

Writing:

11. Students should be experiencing \_\_\_\_\_\_\_ content in a way that incorporates \_\_\_\_\_\_\_\_ to help build the foundational skills of \_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

12. *Closely read* student, teacher, and leader responsibilities for incorporating math, and literacy skills for science proficiency and mark your observations, connections, and questions. Be ready to discuss. List some main points for discussion below.

13. Compare and Contrast Scientific Literacy and Literacy. Why are both important for students?